

eChem TCon

Graphite electrodes

Electrical conductivity measurement



Applications

- Resource monitoring
- Control of industrial discharges
- Measurement of the quality of drinking water

Advantages

- Reliable measurements thanks to graphite electrodes
- Automatic temperature compensation
- FlowCell for Bypass installation

Digital conductivity sensor

The conductivity probe has two graphite electrodes placed opposite each other. A voltage is applied to the electrodes to generate a current in the measurement field.

The strength of the current depends on the number of ions (anions and cations) in the water moving between the two electrodes. Thus, a high number of ions in the medium increases the electrical conductivity.

The sensor is available with a fixed cable of 2 or 10 meters. Cable extensions, 0.3 m, 2 m, 10 m and 25 m, are available.



The digital TCON probe works with TriBox Mini and TriBox 3 transmitters.

Once the probe is connected, the transmitter powers the sensor, receives and uses the data. The measurements are displayed on the screen, they are recorded and can be converted to the 4-20 mA analog signal.

Interface on web browser accessible by Wifi or Ethernet.

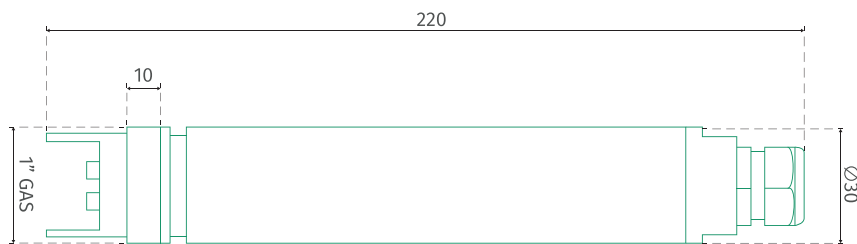
-TriBox Mini-

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Technical specifications

Measurement technology	Current measurement between two electrodes
Principle of measurement	Conductivity with two graphite electrodes
Parameter	Electrical conductivity and temperature
Measurement range	0,00 μ S ... 20000 μ S
Measurement accuracies	+/- 0,5 μ S à 20 μ S
	+/- 5 μ S à 200 μ S
	+/- 50 μ S à 2000 μ S
	+/- 500 μ S à 20000 μ S
Response time	T90 < 60 s
Temperature compensation	Automatic
Materials	PVC and graphite
Dimensions	Diameter 33 mm, length 220 mm
Connector	8 pin M12 connector, 2 or 10 meter fixed cable
Interface	RS-485 / Modbus RTU
Consumption	NS. 60 mA at 12 VDC, approx. 35 mA for 24 VDC
Power supply	12 ... 24 VDC
Maintenance	Frequency of cleaning deposits to be determined by the user depending on the environment
Calibration interval	24 months
Compatibility	Modbus RTU - Transmitters TriBox 3, TriBox mini
Warranty	24 months in the European Union - (except wearing parts)
Maximum pressure	10 bar.
Temperature of the medium / sample	0 ... + 50 °C
Ambient temperature	0 ... + 50 °C



Measuring cell for
By-Pass installation